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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/529,991

04/24/2000

KARI HUTTUNEN

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04/05/2004

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EXAMINER

HO, DUC CHI

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,991

Applicant(s)

HUTTUNEN, KARI

Examiner

Duc C Ho

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7-11, and 16 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 12-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 8-9, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina (US 6,031,832-in record).

Regarding claim 1, Turina discloses a method and apparatus for improving performance of a packet communications system. For a GPRS mobile-terminal packet transfer, the network's scheduling of the packet transmission is based on the current

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traffic load and the priority that was given to the packet, see col. 2, lines 49-67. In Turina, a VIP channel reservation request message can be sent over the uplink PRACH, and the request message may indicate a VIP priority. As a matter of fact, when the VIP priority is already known by the network, from a preceding QOS negotiation from subscriber data, see col. 6, lines 3-35, the known VIP priority suggests the base station of the Turina's network having an ability to provide an indication of its traffic load in the downlink PRACH such that the uplink PRACH's priority can be scheduled.

using the telecommunication connection for connection set up and data transfer, the telecommunication connection including a channel (the uplink PRACH 34- fig. 2, see col. 6, lines 7-8) for relaying channel allocation requests transmitted by the subscriber terminal to the network part (the mobile station 16-fig. 1 communicates with the network 12 via the base station/transceiver section 4, see col. 5, lines 34-36).

Turina, however, doesn't particular teach *controlling the telecommunication system load by adjusting the capacity of the channel used for relaying the channel allocation request.*

One skilled in the art would recognize the advantage of controlling the telecommunication system load by adjusting the capacity of the channel used for relaying the channel allocation request.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a mechanism in which the channel capacity of the PRACH can be adjusted into the system of Turina such that the base station controlling the load of a

network would provide an indication of the traffic load in the PRACH such as the USF associated with the PRACH is set to "FREE" meaning the channel has capacity to accept transmitting a packet channel request, and therefore, providing the mobile station the uplink PRACH for implementing the transmission request.

Regarding claim 8, in Turina the controlling load method is inherently implemented by the base station 14-fig. 1.

Regarding claim 9, in the current GPRS standard (GSM Technical Specification GSM 04.60, Version 0.9.1, Sep., 26, 1996), the physical channel dedicated to packet data traffic in the GPRS is called a Packet Data Channel (PDCH). For a GPRS mobile-originated packet transfer, a MS initiates the packet transfer by making a random access request on the PDCH uplink over the Packet Random Access Channel (PRACH). In other words, a high PRACH capacity such as the random access sub-channel for making a random access request is taught by Turina, col. 2, lines 11-33.

Regarding claim 10, the claim has similar limitations as claim 1. Therefore, it is rejected under Turina for the same reasons set forth in the rejection of claim 1.

Regarding claims 2, and 11, Turina system is capable of decreasing channel capacity when a base station system becomes overloaded, and when the load drops to a desired level, increasing the channel capacity, see col. 6, lines 3-20.

4. Claims 7, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina, in view of Hjelm et al. (US 6,529,497), hereinafter referred as Hjelm.

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Regarding claims 7, and 16, Turina discloses all claimed limitations, except a step measuring continually the base station system's processor load or the signaling load between the base station and the base station controller.

Hjelm discloses channel allocation and release for packet data services, in which the load function of the regional processor (RP) 54-fig. 1A for a BSC and a BS is measured, see figures 4C-4E, see column 11, lines 1-67.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a mechanism in which the signaling load between the base station and the base station controller is measured as taught by Hjelm into the system of Turina such that to prevent the base station from overloading by relaying the USF information "r" to the mobile station in order to stop the mobile station from transmitting a random access request Ra.

Allowable Subject Matter

5. Claims 3-6, and 12-15 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claim 1-2, 7-11, and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc C Ho whose telephone number is 703-305-1332. The examiner can normally be reached on 6.30AM-3.00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 703-308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Patent Examiner



Duc Ho

03-31-04